SCHOOL NURSIN JUMPARY SHEET

CHOOL 3 Fiem; I Middle; I High		SCHO	OOL DISTRICT Wa	satch C	ounty	DATES COVE	RED: Aug 15, 1584 to
otal Enrollment 2608 otal Teachers/Staff 120 TE of Nurse(s)	-		NURSE: Maren				May 31, 1985
verage Hours per week21.2 4.6 h otal Home Visits otal Outside Agency Visits	rs/day	•	W	orked	001 days x 4 hou 848 hours: 11	2 hours	736 hrs owed additional County
	:		T	ime sp	ent in school	.s	
. HEALTH SUPERVISION  Health Evaluation and Consultat	,	Total No. P	upil Contact	Total	No. Referrals	TOTAL Treated	NO. REFERRALS COMPLETED Comments/Outcome
Acute Illness and First Aid (Wa Child Abuse	lk-in)	67					
Referred to HCS				4			
By Nurse Kindergarten registration SCREENING BY NURSE OR OTHER	n	64 hours	reg: 215	3 v.	ision referra	ls 2	
Vision Hearing		1968	٠,	9.	5	69	4 mvd rest gp in Aug
Scoliosis Screenir Weight and Height		508	13 hours	1	4	3	1 has appt
Treat Cultures Blood Pressur Nuisance Diseases	e-chec		idents 54 t	eacher	6		
TB Skin Tests Immunization Status		24 215.75	hours: checl	ked Ele	0 em, Middle Sc	hools all	immunized that were
Other(specify):		see 1	etter from SI	Ietter	CS .		inadequate
Health Education/Consultation Students Parents		583student		5	Comments/Dutc	ome >	<u> </u>
Teachers/Staff Groups/Classes TAUGHT		6 hours	Dental Health nutrition ns heart less				
Community Agencies Health			coliosis Edu				
Social Services Mental Health							
Physicians I.E.P. Activities	``						
Team Staffings Health Data on I.E.P.							

Suzanne Dandoy, M.D., M.P.H. Executive Director

# COMMUNICABLE DISEASE NEWSLETTER

Adele P. Nelson, R.N., M.P.H., Director Division of Community Health Services EDITOR: Craig R. Nichols, M.P.A., State Epidemiologist Director, Bureau of Epidemiology (801) 533-6191 MONTH September YEAR 1985

#### CONTENTS

- 1. Travelers' Diarrhea
- 2. Malaria Among Travelers to Mexico
- 3. Poliomyelitis in Finland
- 4. Rabies-Utah
- 5. Update: AIDS in the San Francisco Cohort Study
- Update: Evaluation of HTLV-III/LAV Infection in Health-Care Personnel--U.S.

## TRAVELERS' DIARRHEA1

The National Institutes of Health has released a report on travelers' diarrhea (TD) developed by a consensus panel. The experts agreed that some, but not all, diarrhea can be prevented by avoiding potentially contaminated food and water and by following hygienic practices. The panel does not recommend antimicrobial agents for prevention, as rapid treatment can shorten travelers' diarrhea to 30 hours or less in most people.

## Treatment guidelines include:

- Fluid and electrolyte balance can be maintained by drinking potable fruit juices, caffeine-free soft drinks, and salted crackers.
   Alcohol, caffeine-containing beverages and dairy products should be avoided.
- If rapid relief of symptoms is desired after one or two unformed stools accompanied by cramps, nausea, or malaise, diphenoxylate or loperamide may be taken.

An alternative is to start bismuth subsalicylate (1 oz every 30 minutes for eight doses). Although this regimen decreases the number of stools and increases their consistency, the beneficial activity of bismuth subsalicylate is somewhat slower than that of antimotility drugs.

- 3. If it is important to shorten the course or decrease the severity of moderate to severe TD, antibicrobial agents may be taken. After three or more loose stools with symptoms, consideration can be given to a short course of trimethoprim/sulfamethoxazole or trimethoprim alone or doxycycline.
- 4. A small percentage of travelers have persisting diarrhea with serious fluid loss, fever, and blood or mucus in the stools. This suggests that a more serious illness is involved, and such individuals should seek medical attention.
- 1 Adapted from National Institutes of Health, Consensus Development Conference Statement, January 28-30, 1985. "Travelers' Diarrhea", Volume 5, Number 8.

## MALARIA AMONG TRAVELERS TO MEXICO1

"The Centers for Disease Control (CDC) has been notified of <u>Plasmodium</u>
vivax malarial infection in 12 United States tourists who visited Mexico. Two
cases occurred in January 1985 in Puerto Vallarta; the other 10 cases occurred
during May and June 1985 in the vicinity of Acapulco.

"Transmission of <u>Plasmodium vivax</u> malaria is reported to occur in the rural areas of both Jalisco and Guerrero, the Mexican States in which Puerto Vallarta and Acapulco are located. Current CDC recommendations indicate that there is no risk of malaria in major tourist resorts along the Pacific and Gulf coasts of Mexico, and the National Malaria Service of Mexico has not received any reports of malaria in Mexican or foreign tourists to these areas. However, these few recent cases among U.S. travelers suggest that malaria can be transmitted in such areas, albeit rarely.

"While chemoprophylaxis is not currently recommended by CDC for travelers to these areas, physicians who advise patients before travel to Mexico should emphasize the importance of measures to reduce contact with mosquitoes during evening and nighttime hours, such as remaining in well-screened areas when possible, wearing protective clothes that cover most of the body, and using insect repellent on exposed areas of skin. Malaria should be considered as a possible cause of a febrile illness in persons who have recently returned from resort vacations in Pacific coastal areas of Mexico."

#### Reference:

1 Department of Health and Human Services, Public Health Service, Centers for Disease Control, Advisory Memorandum No. 81, August 13, 1985.

## POLIOMYELITIS IN FINLAND1

"During the period August 1984 through January 1985, nine cases of paralytic and one case of non-paralytic poliomyelitis caused by wild-like poliovirus type 3 were reported from Finland. In February 1985, a mass polio vaccination campaign was conducted during which oral polio vaccine was offered to the entire population of Finland. No other cases have been reported and, since May 1985, no polioviruses have been isolated from individuals or sewage. Since Finland is no longer considered endemic or epidemic for polio disease, the specific recommendation that travelers to Finland should be immune to poliomyelitis is withdrawn.

"The Centers for Disease Control continues to recommend that all persons less than 17 years of age complete a primary series of polio vaccine and that all travelers to countries known or thought to have endemic or epidemic poliomyelitis, regardless of their age, be immune to poliomyelitis before their departure from the United States. Schedules for primary immunization require three or more doses, at least 1 month apart. An additional dose is recommended for travelers who have completed their primary series. In general, oral polio vaccine (OPV) is the vaccine of choice for persons less than 18 years of age and older persons who have previously completed a primary series of either OPV or inactivated polio vaccine (IPV). IPV is the vaccine of choice for persons 18 years of age or older who have not completed a primary series; however, for unimmunized persons 18 years of age or older who

are <u>departing in less than 4 weeks</u>, one dose of <u>OPV</u> is recommended. For partially vaccinated travelers who must depart, the remaining doses of polio vaccine should be given later, at the recommended intervals."

#### Reference:

1 Department of Health and Human Services, Public Health Service, Centers for Disease Control, Advisory Memorandum No. 82, August 21, 1985.

### RABIES - UTAH

The August 1985 "Communicable Disease Newsletter" incorrectly reported a case of animal rabies from Salt Lake County. The bat which was rabid was captured in Utah County.

A total of four cases of animal rabies has been reported in Utah during the first three quarters of 1985. Utah County accounted for two of the cases while Morgan and Millard Counties each identified a single case. All rabid animals were bats; a total of four humans and one dog were exposed (bitten or scratched) by the bats. All humans were prophylactically treated with rabies immune globulin (RIG) and human diploid cell rabies vaccine (HDCV). Because the dog was unimmunized, it was destroyed.

Several other individuals have also been treated this year with HRIG and HDCV. In all of these cases, the biting animals escaped or were destroyed before they could be tested. In one case, a bat involved in a biting incident was placed into a garbage disposal without being held for testing. The individual who was bitten may have been able to forego treatment if the bat had been examined and found not to be rabid.

## UPDATE: ACQUIRED IMMUNODEFICIENCY SYNDROME IN THE SAN FRANCISCO COHORT STUDY, 1978-1985

Between 1978 and 1980, a cohort of approximately 6,875 homosexual and bisexual men who had sought evaluation for sexually transmitted diseases at the San Francisco (California) City Clinic was enrolled in a series of studies of the prevalence, incidence, and prevention of hepatitis B virus infections. In 1981, six of the first 10 men reported with acquired immunodeficiency syndrome (AIDS) in San Francisco were discovered to be members of the City Clinic cohort. Subsequently, the Department of Public Health and CDC began a study of cohort members for AIDS and for infections with human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV), the cause of AIDS.

In a representative sample of cohort members, prevalence of antibody to HTLV-III/LAV, measured by an enzyme immunosorbent assay (EIA), increased from 4.5% in 1978 to 67.3% in 1984. From January through August 1985, HTLV-III/LAV antibody prevalence further increased to 73.1%. The number of AIDS cases reported among cohort members increased from 166 in 1984 to 262 in August 1985.

The cumulative incidence of AIDS in City Clinic cohort members is now 3,825 per 100,000, the highest of any reported population. Almost three-quarters of cohort members now have serologic evidence of HTLV-III/LAV infections. The long-term prognoses for these men is unknown. The fact that two-thirds of men infected for over 5 years have not developed AIDS or AIDS related illness is an encouraging indication that infection with this virus is not necessarily followed by rapid development of symptoms and death.

Adapted from Centers for Disease Control Morbidity and Mortality Weekly Report, Vol. 34/No. 38, September 27, 1985.

# Update: Evaluation of Human T-Lymphotropic Virus Type III/ Lymphadenopathy-Associated Virus Infection In Health-Care Personnel — United States 1

The occurrence of the acquired immunodeficiency syndrome (AIDS) in intravenous (IV) gusers, blood transfusion recipients, and persons with hemophilia indicates that parenteral transmission of human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV) occurs via infectious blood or blood products (1). Currently available practices have nearly eliminated these risks for transfusion recipients and persons with hemophilia (2,3). Because health-care personnel may be inadvertently exposed to the blood of AIDS patients, several studies have been conducted to determine the prevalence of HTLV-III/LAV antibodies in health-care personnel who have cared for these patients (4-10). Combining published results with data reported to CDC shows that, to date, 1,758 health-care workers participating in such studies have been tested for antibodies to HTLV-III. Twenty-six (1.5%) were seropositive, and all but three of these persons belonged to groups recognized to be at increased risk for AIDS. Epidemiologic information is not available for one of these three health-care workers who was tested anonymously. Because of the high level of interest in these studies and in the potential for occupational transmission of HTLV-III/LAV through parenteral and mucosal routes, the case histories for these two health-care workers are reported below.

Patient 1. A female health-care worker was tested for serum antibodies to HTLV-III in November 1984 as part of a study of hospital personnel. She had sustained accidental needlestick injuries in November 1983 and March 1984 (12 months and 8 months before) while drawing blood from patients with AIDS. At the time of enrollment in the study, serum antibodies to HTLV-III were detected by enzyme immunoassay (EIA) and Western blot techniques. No serum obtained before or within 12 months after the needlesticks was available for testing. She was in good health until June 1984, when she developed mild but persistent lymphadenopathy, most marked in the axilla. Beginning in August 1984, she experienced intermittent diarrhea. When interviewed by a physician, the patient denied IV drug use or blood transfusions and reported being heterosexually monogamous since 1981. Her long-term sex partner denied homosexual activity, IV drug use, or other known risk factors when interviewed separately. Although repeatedly antibody negative by EIA and Western blot methods over an 8-month period, HTLV-III was recovered from his peripheral lymphocytes in April 1985 but could not be recovered from lymphocytes obtained several months later.

Patient 2. A male laboratory worker was discovered to be lymphopenic after he volunteered to be tested in conjunction with a study in April 1985. At that time, he had serum antibodies to HTLV-III by EIA and Western blot methods. No previous blood samples were available for testing. As part of his job, he processed platelets pooled from individual donors for transfusion. In December 1983, he sustained an accidental cut on the hand while processing blood from a patient with leukemia. He also sustained an accidental needlestick injury in August 1984 while processing a unit of pooled platelets. Both incidents resulted in parenteral exposure to blood from other persons. It is not known whether any of the individual platelet donors or the patient with leukemia had HTLV-III infection. The health-care worker is asymptomatic, although he had transient cervical lymphadenopathy during early 1985. HTLV-III was recovered from his peripheral blood lymphocytes in September 1985. During three independent interviews, he denied any homosexual activity, IV drug use, foreign travel, or blood transients. He described himself as heterosexual and was not aware that any of his approxi-

Victed by J Nadler, MD, S Landesman, MD, D Rechtman, MD, S Holman, MS, New York City, New York; J Groopman, MD, Boston, G Seage, MPH, Boston Dept of Health and Hospitals, G Grady, MD, Massachusetts Dept of Health; J Gerberding, MD, San Francisco, California; Environmental Epidemiology Br, Laboratory of Tumor Cell Biology, National Cancer Institute, National Institutes of Health; Hospital Infections Program, AIDS Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Editorial Note: These two health-care workers probably represent occupational transmission of HTLV-III/LAV due to parenteral exposure, although in neither was a preexposure serum sample available to date the onset of infection. Although not reported during investigations of these two cases, it is difficult to totally assure that additional risk factore for AIDS were absent. For purposes of epidemiologic surveillance, a case of occupationally acquired HTLV-III/LAV infection should ideally include all the following features: a worker with no identifiable risk factors for AIDS whose serum, obtained within several days of the date of a possible occupational exposure, is negative for antibody to HTLV-III/LAV but whose follow-up serum, in absence of interim exposure to other risk factors, is positive for antibody to HTLV-III/LAV. The two cases reported here do not fully meet these ideal criteria. However, there is one published report from England of a nurse who developed HTLV-III/LAV antibody following an accidental needlestick injury (11). Her serum was negative for antibody to HTLV-III/LAV at the time of exposure. This nurse reportedly had none of the recognized risk factors for AIDS and was asymptomatic at the time the report was published.

The two cases reported here represent the only known evidence of probable occupational transmission of HTLV-III/LAV in the United States. This confirms that the risk of transmission of HTLV-III/LAV infection to health-care workers from patients is extremely low (4-10). HTLV-III/LAV infections appear to be much less transmissible through needlesticks than hepatitis B; nearly 26% of persons comparably exposed to a hepatitis B surface antigenpositive patient develop infection (12). Nonetheless, personnel should follow recommendations designed to minimize the risk of exposure to parenteral or mucosal (e.g., blood spatter on conjunctiva) contact with potentially infectious materials from patients with AIDS or suspected AIDS (13,14).

Epidemiologic studies of needlestick injuries in hospital personnel indicate that over 40% of the accidents are potentially preventable if recommended precautions are followed when handling used needles or other sharp objects (6). Educational programs to familiarize health-care workers with the basic practices in infection control are essential to the prevention of AIDS and other infections. Health-care workers and others should become familiar with and follow recommended precautions when handling specimens, secretions, and excretions from persons known to be infected with HTLV-III/LAV. Health-care personnel whose serum is positive for HTLV-III/LAV antibody should follow the precautions that have been published for health-care workers with AIDS (15).

References available upon request from the Bureau of Epidemiology, 533-6191.

## Reference:

1 Centers for Disease Control, Morbidity and Mortality Weekly Report, Vol. 34/No. 38, September 27, 1985.

## **MONTHLY MORBIDITY SUMMARY**

UTAH DEPARTMENT OF HEALTH SELECTED REPORTABLE DISEASES

APPROVAL #8000008
APPROPRIATION #2870-A33011

PROVISIONAL DATA

Month SEPTEMBER 1985

PPRUPRIAI	ION #2870-A	3301	1			Ovis		MAL	רט	17		N	lonth .		EMBER			
County	Estimated Population	Colorado Tick Fever	Gonorrhea	Hepatitis (A, Non-A, Non-B, & Unspecified)	Hepatitis B	Influenza	Meningitis (Bacterial)	Meningitis (Non-bacterist)	Meningococcal Infections	Paittacoels	Rabies (Animat)	Rubella	Rubeola	Salmonelloeis	Shigeliosis	Syphilis (less than 1 year duration)	Tuberculosis (New Active & Relapse)	Tularemia
Beaver	5,100							1										
Box Elder	35,500		2				1											
Cache	65,000													1		1		
Carbon	23,400																	6. 7
Daggett	750																	
Davis	165,000		20	4	1	6				- 37				1				
Duchesne	14,600																	
Emery	12,400																	
Garfield	3,950																	
Grand	7,600																	
1ron	19,000					NEW Y												
Juab	6,050																	
Kane	4,500																	
Millard	13,500		1								1							
Morgan	5,300			1														
Plute	1,500																	
Rich	2,150																	
Salt Lake	675,000		61	11	10		6	7	1					8	5		1	
San Juan	12,600		1										E E					
Sanpete	16,800												0				1	
Sevier	15,900			1														
Summit	12,000		3															
Tocele	28,100			1														
Uintah	24,200																	
Utah	245,000		4				1				1							
Wasatch	9,200													1				
Washington	32,300		2	1	1										1			
Wayne	2,100		MA TO															
Weber	154,500		19	7	11										1			
Utah State Total	1,613,000	0	113	26	23	6	8	7	1	0	2	0	0	11	7	0	2	0
This Mo. Last Yr.	SEPT. 84	2	113	27	6	8	4	14	0	0	2	0	0	17	7	5	1	1
This Yr.To Date	1985	10	942	260	135	1990	80	40	9	0	4	0	0	77	73	8	12	2
Last Yr. To Date	1984	22	986	376		2892	61	44	7	1	5	7	27	90	58	28	31	6
	AMEBIASIS -	1 [	OCCID	TODON	NCOS	TC -1	EN	CEDL	TT IAL	TC -	2 7	TARE	TAST	5 -51	. KAW	ASAK	(I -1	

Other Diseases: AMEBIASIS -1, COCCIDIODOMYCOSIS -1, ENCEPHALITIS -2, GIARDIASIS -51, KAWASAKI -1,

PERTUSSIS -5, PNEUMONIA -2, RHEUMATIC FEVER -6

RABIES (ANIMAL) REVISION FOR AUGUST 1985 - DELETE (1) SALT LAKE, ADD (1) MORGAN

AIDS 1985 CUMULATIVE TOTAL -13

TOXIC SHOCK SYNDROME 1985 CUMULATIVE TOTAL -8

WASATCH CITY/COUNTY BOARD OF

September 16, 1985

12:00 P.M

Welcome:

Invocation:

Alcohol/Drug Report: Mr. Blanthorn

Nursing Director Report: Mrs. McAffee

WIC: - 764

Well Child: 14 - 10 last Ino

Hypertension: 135 475 -60% followap (

Flu Clinic: 20 closes to hosp all

Immunization: 135

School Health: / employee To & / foreign Student

Mr. Wright Environmental Health:

Wordan Ranch R.V. Status: Well permit granted ????

Water Supply: Charleston - work on system

LState Health (proposal for more funding):

Temporary Food Permits: Severs Fair

Landfill: Helen

Timberlakes: New Spring - plat 18

14) Aids Update: Mr. Wright

5) Pertussis Outbreak: Mr. Wright

6) Senior Citizens Health Screening: .

havy Carcelli called

2 more cases of AIDs 9-1-65

Two more cases of AIDS, or Acquired Immune Deficiency Syndrome, have been diagnosed in Utah, bringing the total to 21.

The two newest victims are homosexual or bisexual men, the largest AIDS victim category, said Byron Haslam, coordinator of communicable disease for the Utah Department of Health. Fifteen of the 21 victims fall in this

Four of the remaining victims are intravenous drug users and two acquired AIDS through blood or blood product transfusions.

The first AIDS case in Utah was reported in August 1983. Ten victims have died.

State health officials predict nine more cases of AIDS will be diagnosed this year, bringing the 1985 total to 20.

bena . maise widwife

## MINUTES OF THE WASATCH CITY/COUNTY BOARD OF HEALTH

September 16, 1985

12:05 P.M.

Health Office

Present were:

Calvin Giles Connie Tatton Lynn Webster

Chairman Vice-chairman Member

R. C. Tadd R. Raymond Green, M.D. Phil D. Wright

Commissioner
Medical Officer
Health Officer
Nurse Supervisor
Alcohol/Drug Director

Maxine McAffee Robert Blanthorn

Secretary

Nelda Duke

Excused:

Rulon Phillips Elizabeth Murdock

Welcome:

Mr. Giles welcomed those present and called the

meeting to order.

Invocation:

The invocation was given by Mr. Giles.

Alcohol/Drug Report: Mr. Blanthorn reported he had received the Title XX contract for \$10,252. This is to be used for indigent and alcohol/drug abusers. They now have 20 clients

(the state considers 19 a full load).

Mr. Blanthorn explained how one client being served may bring in several family members or friends for

service.

WIC:

Mrs. McAffee stated we have received referrals from the hospital for our WIC program. We are pleased they are now being aware of our WIC services. We are now serving

264 clients.

Well Child:

We served 14 children this month in our Well Child

Clinic.

Hypertension:

Mrs. McAffee gave a brief report on our hypertension program. Since 1980 we have followed 310 clients with

elevated blood pressure. We are holding hypertension clinics

the first Thursday of each month from 2 to 4 PM.

Flu Clinic:

Mrs. McAffee stated we had only a few people to our first flu vaccination clinic due to the senior citizens being out of town. We will schedule another clinic within the next few weeks.

Immunization Clinic:

We gave 135 doses of vaccine in our immunization clinic last month. The afternoon clinic is going very well.

School Report: See attached copy #1.

Whooping Cough:

Mr. Wright stated there is a whooping cough outbreak in the state as 24 cases have been reported as of July. This is due to the low immunization level.

Jordan R.V. Ranch:

Mr. Wright said Mr. Jordan has received permission to drill a well for his RV Park. He presented a map of the development and discussed requirements they will have to meet before our department will approve the development.

Jordanelle Meeting:

It was mentioned a meeting has been scheduled for September 19th for all those interested in the Jordanelle project.

Water:

Daniel Domestic Mr. Wright said the Daniel Domestic Water Company has asked for a postponement of their court hearing until they can get help from an attorney.

Charleston Water:

Mr. Wright stated the Charleston Water Conservency District has been working on their water system so they can get it approved. The only approved water systems in our county are Heber, Wallsburg and Midway. After some discussion as to how we can encourage other water systems to get an approved rating, Mr. Giles made a motion we inquire of the state to see if they would be willing to come to our county and present a workshop and invite members of the water boards of the county to attend. Commissioner Tadd seconded the motion. Motion carried. Mr. Wright will contact Mr. Webb of the state.

State Funding: Mr. Wright stated the state has asked for a list of environmental health programs we offer so they can go to the state for more monies for environmental health.

Temporary Food Permits:

Mr. Wright said temporary food permits were issued for Midway Swiss Days but the booths needed some improvement. He sent a letter to the chairman and offered to give a food handlers class before Swiss Days next year.

Landfill:

Mr. Wright stated our present landfill will last approximately 5 more years and they are working on other sites. The landfill at strawberry valley is supposed to be closed but people are beginning to dump there again. Mr. Wright sent a letter to the Department of Transportation asking them to clean it up.

Timberlakes:

Mr. Wright said Veigh Cummings is developing a new spring in Timberlakes near lookout mountain. He also wants to open 75 more lots at the top of the subdivision.

Aids:

It was reported there are 27 cases of Aids in Utah.

Senior Citizens Health Monies:

Mr. Wright said we have \$3,000 allocated through Mountainlands for health screening for senior citizens. He asked for suggestions as to what services we should offer to our senior citizens. It was suggested we get a podiatrist and also do blood work for those who have not had it done.

Next Meeting:

The next meeting was scheduled for Monday November 18th 12:00 noon. If the need arises before this time another meeting will be scheduled.

Meeting adjourned at 1:30 P.M.

Chairman

## School Health:

TB Testing of school employees-1 positive reaction (employee) 1 positive foreign student

Blood Pressure checking of 65 school employees- 9 need follow up

Blood Pressure checking at clinic 9/5/85 34 other days 4 jail inmate 1

Kindergarten vision screening 265 2 referred Pre-kindergarten vision screening 62 1 referred

Nurse is teaching nutrition class in 3rd grades at JRS

## LAZY EYE CLINIC

Three and four year old children need their eyes checked to determine if they are developing the ability to see in both eyes. If the child has a condition such as astigmatism, near or far sightedness (or is cross-eyed) in one eye--the brain will recieve a blurred image from that eye. The brain cannot tolerate this and will automatically blot out the vision from that eye. That eye will not be used and consequently will not develop vision because just as muscles develop with use--so does vision develop with use of the eyes. If one eye is not used no vision will develop in that eye. Vision develops gradually only till the age of seven years which is why children with an eye problem (causing them to use one eye), need to have the condition corrected early so that they have enough time (preferably years) to develop vision.

Amblyopia is the resulting loss of vision after age 7. Glasses will be of no benefit then. They cannot give vision where there is none.

The Wasatch City/County Health Department will have an Amblyopia Clinic from 10 AM to 12 noon on September 25th at 805 West 100 South in Heber.

# UTAH DEPARTMENT OF HEALTH DIVISION OF COMMUNITY HEALTH SERVICES BUREAU OF EPIDEMIOLOGY

Suzanne Dandoy, M.D., M.P.H. Executive Director

# COMMUNICABLE DISEASE NEWSLETTER

Adele P. Nelson, R.N., M.P.H., Director Division of Community Health Services

EDITOR: Craig R. Nichols, M.P.A., State Epidemiologist Director, Bureau of Epidemiology (801) 533-6191 MONTH October YEAR 1985

CONTENTS

- 1. HTLV-III Antibody Testing
- 2. Tetanus Prevention
- 3. Delta Hepatitis
- 4. Staff Changes

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## HTLV-III ANTIBODY TESTING

The Association of State and Territorial Health Officials (ASTHO) convened a consensus conference in Bethesda, Maryland on August 1-2, 1985, to review the use of the human T-cell lymphotropic virus type III (HTLV-III) antibody tests and to update guidelines pertaining to HTLV-III testing. The conference also discussed intervention strategies for acquired immunodeficiency syndrome (AIDS). These recommendations have now been published under the title "Guide to Public Health Practice: HTLV-III Antibody Testing and Community Approaches". Sections dealing specifically with HTLV-III testing have been reproduced below.

## HTLV-III ANTIBODY TESTING

## A. GENERAL PRINCIPLES

- 1. The HTLV-III antibody test is used to detect the presence of antibody to HTLV-III Virus, which denotes that the person is or has been infected with HTLV-III. Used alone, the HTLV-III antibody test is not a test to diagnose acquired immunodeficiency syndrome (AIDS).
- 2. The HTLV-III antibody test is an extremely important procedure for protecting the nation's blood supply, and is a valuable test to assist research efforts into AIDS and HTLV-III related problems. The test has other selective clinical and public health applications, and has been added as a criterion in the application of the recently-redefined case definition of AIDS.
- 3. At the present time, the HTLV-III antibody test has limited utility for purposes other than stated above. The HTLV-III test should not be used for generalized screening or as a precondition for employment, evidence of insurability, admission to hospitals, or admission to school.
- 4. The HTLV-III antibody test should only be performed with the individual's informed consent. That consent should include specific reference to the test, and should not be part of blanket consent procedures.
- 5. Because of the serious potential for social and pyschological harm to the individual resulting from the HTLV-III antibody test results, great care must be taken to inform the public and health care professionals about limitations in current understanding of the test results and of the entire disease process related to HTLV-III infection, including AIDS.

- 6. Information gathered from the testing or counseling of individuals must be kept strictly confidential.
- 7. State and local health departments, working in concert with the private medical and hospital communities, university systems, blood banks, and plasma centers should establish a network and referral system (if not currently in place) of physicians and other health care providers with expertise in dealing with HTLV-III infection and related conditions, including AIDS.

### IIL LABORATORY TESTING FOR HTLV-III ANTIBODY

The only test currently licensed for detecting antibody to HTLV-III in blood and blood products is the enzyme immunoassay (EIA) using disrupted whole virus antigen. The currently-licensed EIA test is both highly sensitive and specific. A variety of other EIA tests (some using cloned antigen), a fluorescent antibody test, and other procedures are being developed and tested and may be licensed in the future. In addition, the Western blot test, which is an immunoelectroprecipitin test using disrupted whole virus antigen, is available through many health department laboratories, research laboratories, and as a service through the manufacturers of EIA kits. The Western blot test is a reference laboratory procedure and must be performed carefully with appropriate standards. It is a useful additional test to help assess the significance of a positive EIA test.

### A. Definition of a Positive EIA Test

Since several EIA test kits to detect antibody to HTLV-III have been licensed and each has unique characteristics and a slightly different method of determining a positive test, no single definition of a positive antibody test is possible. In determining whether reactive results represent a positive test, some general principles apply:

- To be positive, the reactive test must be reproducible and yield approximately
  the same degree of reactivity when repeated several times independently or
  with different specimens from the same person.
- 2. The more highly reactive the test, the greater the probability that the test is truly positive. Test results that cluster near the test cut-off value are likely to be nonspecific reactives or "false" reactives.
- Specimens that have a reactive EIA test and that are also reactive by a second type of test, such as Western blot or fluorescent antibody, should be considered true positives.
- 4. A strongly reactive repeated EIA test that is non-reactive using a second type of test or a repeated weakly reactive EIA test that is reactive using a second type of test probably are true positives, but these represent equivocal results and additional testing is warranted.
- 5. A weakly reactive repeated EIA test that is non-reactive using a second type of test usually denotes a nonspecific or falsely reactive test reaction. Additional follow-up or testing often is warranted to assure the correctness of the finding.

## DELTA HEPATITIS1

"The delta virus (also known as hepatitis D virus [HDV] by some investigators) is a defective virus that may only cause infection in the presence of active hepatitis B virus (HBV) infection. The delta virus has been characterized as a particle of 35-37 nm in size, consisting of RMA (mw 500,000) as genetic material and an internal protein antigen (delta-antigen), coated with HBsAg as the surface protein. Infection may occur as either coinfection with hepatitis B or superinfection of a hepatitis B carrier, each of which usually cause an episode of acute hepatitis. Coinfection usually resolves, while superinfection frequently causes chronic delta infection and chronic active hepatitis. Both types of infection may cause fulminant hepatitis.

"Delta infection may be diagnosed by detection of delta-antigen in serum during early infection and by the appearance of delta antibody during or after infection. Routes of delta transmission appear to be similar to those of hepatitis B. In the United States, delta infection occurs most commonly among persons at high risk of acquiring HBV infection, such as drug addicts and hemophilia patients.

"A test for detection of delta antibody is expected to be commercially available soon. Other tests (delta antigen, IgM anti-delta) are available only in research laboratories.

"Since the delta virus is dependent on hepatitis B for replication, prevention of hepatitis B infection, either preexposure or postexposure, will suffice to prevent delta infection in a person susceptible to hepatitis B. Known episodes of perinatal, sexual, or percutaneous exposure to sera or persons positive for both HBV and delta virus should be treated exactly as such exposures to hepatitis B alone.

"Persons who are HBsAg carriers are at risk of delta infection, especially if they participate in activities that put them at high risk of repeated exposure to hepatitis B (parenteral drug abuse, homosexuality). However, at present there are no products available that might prevent delta infection in HBsAg carriers either before or after exposure."

### Reference

1 Adapted from Centers for Disease Control Morbidity and Mortality Weekly Report, Vol. 34/No. 22, June 7, 1985.

## STAFF CHANGES

Ilene Risk and Ed Tierney have been hired as Community Health Specialists in the Bureau of Epidemiology. Ilene has been assigned to the Sexually Transmitted Disease (STD) Control Program and Ed will work in the Communicable Disease Control Program.

Rod Lower has resigned his position in the STD Control Program in order to pursue additional education. We wish Rod much success.

#### TETANUS PREVENTION

No cases of tetanus have been reported in Utah since 1981, when two elderly residents died of the disease. Tetanus is an acute disease induced by the exotoxin of the tetanus bacillus, <u>Clostridium tetani</u>. The exotoxin is produced anaerobically at the site of an injury, usually a puncture wound or laceration.

However, the Centers for Disease Control report<sup>1</sup> that 253 cases of tetanus were reported in the United States from 1982 through 1984. The majority of cases (71%), where the age was known, occurred in adults 50 years of age or older.

The case fatality rate for tetanus varies from 30-90% depending on the age of the patient, length of incubation and therapy. During the three year study period (1982-1984), the case fatality rate was 26% (52% for patients 60 years and older and 13% for those under age 60). No deaths occurred among patients under 30 years of age.

Approximately 95% of patients had not received a primary series of tetanus toxoid.

Tetanus can be prevented by vaccination with a primary series of three doses of tetanus toxoid and booster doses every ten years. Individuals seven years and older should receive Tetanus and Diphtheria Toxoids Adsorbed (Adult Use) (Td). The recommended preparation for children before the seventh birthday is Diphtheria and Tetanus Toxoids and Pertussis Vaccine (DTP); Diphtheria and Tetanus Toxoids (For Pediatric Use) (DT) is recommended for children before the seventh birthday for whom pertussis antigen is contraindicated.

Childhood immunization programs have been very successful in preventing tetanus among children. Efforts also need to be directed toward providing booster doses every ten years beginning at age 15. Special efforts should be made by both private and public health care providers to immunize adults, especially those 50 years of age and older.

#### Reference

1 Adapted from Centers for Disease Control, <u>Morbidity and Mortality Weekly</u> <u>Report</u>, Vol. 34/No. 39, October 4, 1985.

## **MONTHLY MORBIDITY SUMMARY**



APPROVAL #8000008
APPROPRIATION #2870-A33011

## PROVISIONAL DATA

Month OCTOBER 1985

County.	Estimated Population 19_84	Colorado Tick Faver	Gonorvhea	Hepatitis (A, Non-A, Non-B, & Unspecified)	Hepatitis B	Influenza	Meningitis (Bacterial)	Meningitis (Non-becterial)	Meningococcal	Petitaccels	Hables (Animal)	Rubella	Rubeola	Salmonellosis	Shigellosis	Syphilis (fess than 1 year duration)	Tuberculosis (New Active & Relapse)	Tutaremia
Beaver	5,100																	
Box Elder	35,500		3				*	1		-								
Cache	65,000		3	1			1											
Carbon	23,400			2			1											
Daggett	750								-									
Davis	165,000		22	5		49	7							1				
Duchesne	14,600		4				1											
Emery	12,400																	
Garfield	3,950																	
Grand	7,600																	
iron	19,000																	
Juab	6,050					11.0												
Kane	4,500																	
Millard	13,500									-								
Morgan	5,300																	
Piute	1,500																	
Rich	2,150					-									,			
Salt Lake	675,000	1	99	10	9	2	8	5						8	7	3		
San Juan	12,600		4					•							3			
Sanpete	16,800																	
Sevier	15,900																	
Summit	12,000		2											-				
Toosle	28,100		1	2			1	1										
Uintah	24,200																	
Utah	245,000		6	5	2		1							1				1
Wasatch	9,200			1														
Washington	32,300		1													100		
Wayne	2,100																	
Weber	154,500		63	4							SP			1	2			
Utah State Total	1,613,000		204	30	11	51	20	7	0	0	0	0	0	11	12	3	0	1
This Mo. Last Yr.	OCTOBER 84	1	129	47	13	56	23	8	0	0	1	0	0	14	6	4	2	0
This Yr.To Date	1985	11	1146	290	146	2041	100	47	9	0	4	0	0	88	85	11	12	3
Last Yr.To Date	1984		1115	423	74	2948	84	52	7	1	6	7	27	104	64	32	33	6

Other Diseases: CAMPYLOBACTER -5, GIARDIASIS -64, LEGIONELLOSIS -3, PERTUSSIS -7,

Project:	-			Requesting Agency:	
	Timberlakes	s Plat 18		Wasatch Count	y Health Dept.
By:		Date:	County:		Job No.:
н	. Gill	10/17/85	Wasatch		85-035

## PURPOSE AND SCOPE

In response to a request from Phillip Wright, Wasatch County Health Department, the Utah Geological and Mineral Survey (UGMS) performed a geologic investigation of Timberlakes Subdivision Plat 18 in the El/2, NWl/4, Sec. 23, T. 4 S., R. 6 E., Salt Lake Baseline and Meridian, Wasatch County, Utah (attachment 1). The purpose of the inspection was to determine if subsurface soil and water conditions are suitable for installation of individual wastewater disposal systems on the subdivision lots.

The scope of the investigation included a review of available geologic and soils information and logging of 13 test pits. The test pits ranged in depth from 3.9 to 10.4 feet below ground surface. Present during the investigation, performed on September 25, 1985, were Phillip Wright, William Lund (UGMS), and William Burkes and Dan Blake both with the Utah State Bureau of Public Water Supplies.

## GEOLOGY AND HYDROLOGY

The entire subdivision is underlain by hummocky Quaternary glacial deposits (Baker, 1976). Although only one geologic unit, glacial till, is present on the property, a number of soil types were encountered in the test pits. Glacial till is characteristically heterogeneous, consisting of material from rock units and soil types encountered and eroded by the glacier. When melting begins, the rock and soil materials contained in the ice are deposited as one unit. Numerous melt water streams mix and scour the deposits even more. During a period of retreat, a glacier may leave behind isolated blocks of ice, which after melting create depressions or kettles. This, as well as the typical hummocky glacial terrain which tends to form closed depressions and trap surface runoff, is a likely origin for the numerous small lakes and ponds in the area.

Annual precipitation is approximately 25 to 35 inches, mostly falling as snow between October and March (Woodward and others, 1976). Long months of snow cover and subsequent snowmelt create marshy areas as well as keep small lakes and ponds full. Beaver dams along Lake Creek create additional ponds, and cause a shallow water table. Shallow ground water was encountered in test pits 2, 9, and 10 at 9.0, 3.9, and 7.6 feet respectively (attachment 2). The 1984-1985 water year was drier than in the recent past (1982-1984) when precipitation amounts were well above normal, therefore, ground-water depths are probably lower. In addition, the inspection took place in late September when the water table is at or near its lowest level.

Culinary water for the subdivision will be supplied by a spring approximately 1000 feet southwest of the nearest property line (attachment 2). The recharge area for the spring is southwest of and higher in elevation

than the subdivision and a major drainage separates the spring from the site. As a result, there is no danger of contamination to the spring from individual soil absorption systems in Plat 18.

## SOILS

Soils observed during the field reconnaissance were generally consistant between the test pits (attachment 3). A generalized description would include: 1 to 4 feet of dark gray-black, soft to firm, silty clay topsoil over 5 to 9 feet of brown, very stiff to hard, clay with gravel and cobbles. This soil horizon has a high plasticity and a moderate shrink/swell potential (Woodward and others, 1976). In test pit 11, from 4.7 to 9.4 feet beneath the ground surface, late stage II to early stage III caliche development was observed (attachment 3). This indicates the gravelly clay soils were moderately indurated and the soil horizon is partially plugged with secondary calcium carbonate.

### SUITABILITY FOR SEPTIC TANK DRAINFIELDS

According to the U. S. Soil Conservation Service (SCS) soil survey for the Heber Valley, soil conditions at the site generally present severe limitations for septic tank absorbtion fields (Woodward and others, 1976). Limitations are primarily due to slow permeability. Based on the test pit inspections and field reconnaissance (no lab tests were run), the soil conditions in the subdivision were found to range from poor to unacceptable for septic tank drainfields. The major soil type at depth across the site is a fat clay with gravel and cobbles. The fines fraction (-200 sieve size) was estimated to be from 50 to 90 percent (with high plasticity and moderate shrink/swell potential, SCS, 1976) and therefore a poor soil for soil absorption systems. However, the gravel and cobble fraction ranged from 25 to 50 percent and may allow for a greater degree of percolation than would normally be expected in soils containing so many fines. Percolation tests would be required to confirm the soils suitability.

Test pit number 2 (lot 1863) contained a silty sand and silty clay horizon from the surface to 9.0 feet. Because of the greater permeability of these soils, they would be well suited for use in a soil absorbtion field. However, the ground-water level was 9 feet below ground surface. The water level can be expected to be higher during the spring and summer, and the possibility of saturation and failure of an absorption system in this area is moderate to high. Shallow ground water was observed in other areas on the property (lots 9 and 10), and soil in these locations may remain saturated most of the year. Therefore, these soils would be unacceptable for absorbtion fields.

Test pit 11 (lot 1814) contains a moderately indurated (stage II/stage III) caliche horizon developed in clay with gravel and cobbles. Caliche decreases the permeability of the soil. In addition, the northern portion of the lot drops off rapidly to the north. The caliche horizon will act as an impermeable barrier to the septic tank effluent creating a perched water table which may migrate laterally and eventually result in surface seepage on the steep slope to the north.

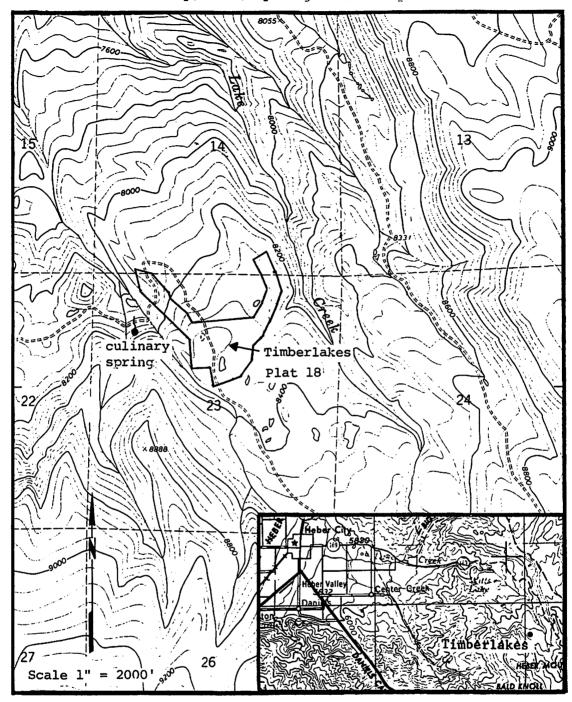
### SUMMARY

Glacial deposits can vary considerably over short horizontal and vertical distances. For that reason, each lot should be carefully evaluated prior to installation of a wastewater disposal system. The majority of the soils observed on site were high plasticity clays that contained a high percentage of gravel and cobbles. Although normally possessing low permeability, the gravel and cobbles may make these soils suitable for installation of individual wastewater disposal systems. Soil suitability should be confirmed by percolation tests on a lot by lot basis, and it should be noted that the soils on some lots may be unacceptable. In addition to soil permeability the presence of seasonally high ground water near streams and ponds must be considered in siting disposal systems. Ground-water conditions during the inspection were probably at the lowest level for the year and will be higher in the spring. Particular care should be taken when installing systems on lots adjacent to areas of known high ground water (lots 1820, 1825, 1863). Lots near lot 1814 should be inspected for layers of impermeable caliche. The caliche development in the area is not particularly thick, and it may be possible to install systems below the plugged layer.

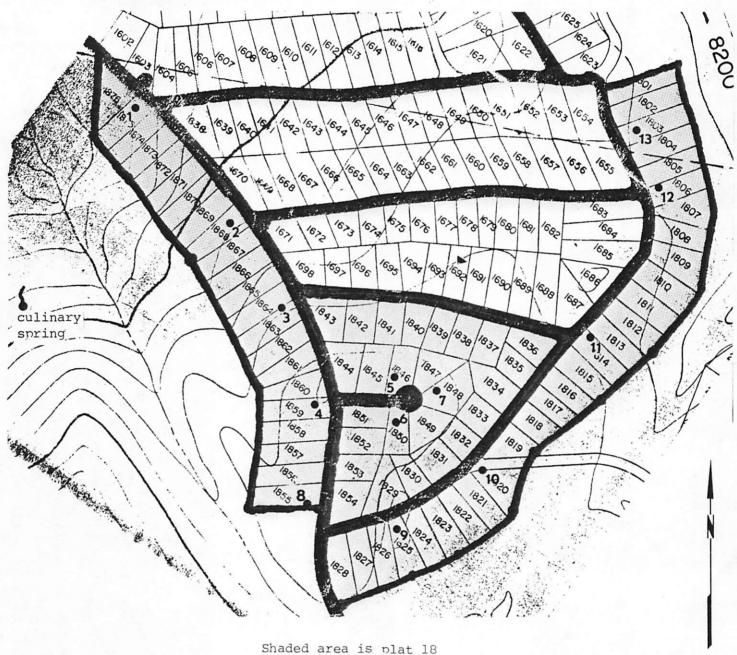
## SELECTED REFERENCES

- Atwood, W. W., 1909, Glaciation of the Uinta and Wasatch Mountains: U.S. Geological Survey Professional Paper no. 61, 96 p.
- Baker, A. A., 1976, Geologic map of the west half of the Strawberry Valley Quadrangle, Utah: U.S. Geological Survey Miscellaneous Investigations Series Map I-931, 1:63,360.
- Bissell, H. J., 1952, Stratigraphy and structure of northeast Strawberry Valley Quadrangle, Utah: AAPG Bulletin V. 36, no. 4, p. 575-634.
- Woodward, Lowell, Jensen, E. H., and Harvey, J. S., 1978, Soil survey of the Heber Valley area, Utah: U.S. Department of Agriculture Soil Conservation Service, Forest Service, and Utah Agricultural Experiment Station, 124 p.

Base map from USGS 7½ minute topographic quadrangle, Heber Mountain, Ut and from Salt Lake City, Utah; Wyoming 2° USGS map



General location map Timberlakes, Plat 18



Scale 1" ≈ 400'

Culinary spring, lots, and test pit locations

## Test Pit Logs\*

	1000 110 Edge
Test Pit 1	
0.0' - 1.2'	Fill material, coarse sandy gravel.
1.2' - 2.7'	Gravelly lean clay (CL); topsoil, dark gray-black, firm, low plasticity, nonindurated, dry; 25 percent gravel, 5-10 percent sand.
2.7' - 10.4'	Gravelly fat clay with cobbles (CH); brown, hard, highly plastic, nonindurated, moist; 25 percent gravel, 20 percent cobbles.
Test Pit 2	
0.0' - 1.0'	Lean clay with sand (CL); topsoil, dark gray-black, firm, low plasticity, nonindurated, dry; 15 percent sand.
1.0' - 2.5'	Sandy lean clay with gravel (CL); red brown-light brown, very stiff, medium plasticity, nonindurated, dry; 25 percent sand, 25 percent gravel.
2.5' - 6.2'	Silty sand (SM); light brown, medium dense, nonplastic, nonindurated, dry; 25 percent fines.
6.2' - 9.0'	Fat clay (CH); brown-red brown, very stiff, medium plasticity, nonindurated, dry; 10 percent sand.
Note: Ground wa	ter encountered at 9.0 feet below ground surface.
Test Pit 3	
0.0' - 2.3'	Lean clay with sand (CL); topsoil, dark gray-black, firm, low plasticity, nonindurated, dry; 15 percent sand.
2.3' - 9.8'	Fat clay with gravel (CH); yellow brown, hard, highly plastic, nonindurated, dry to moist; 15 percent gravel.
Test Pit 4	
0.0' - 3.8'	Sandy lean clay with gravel (CL); topsoil, dark gray-black, firm, low plasticity, nonindurated, dry; 20 percent sand, 20 percent gravel.
3.8' - 9.8'	Gravelly fat clay with cobbles (CH); brown, hard, highly plastic, nonindurated, dry; 20 percent gravel, 15 percent cobbles.

<sup>\*</sup>Soils classified in accordance with procedures outlined in ASTM Standard D2488-84, Standard Practice for Description and Identification of Soils (Visual Manual Procedure).

Test Pit 5	
0.0' - 1.8'	Lean clay with gravel (CL); topsoil, dark gray-black, firm, low plasticity, nonindurated, dry; 15 percent gravel.
1.8' - 7.6'	Sandy fat clay with gravel (CH); brown, hard, highly plastic, nonindurated, dry; 20 percent sand, 20 percent gravel.
Test pit 6	
0.0' - 1.0'	Lean clay with gravel (CL); topsoil, dark gray-black, firm, low plasticity, nonindurated, dry; 15 percent gravel.
1.0' - 9.2'	Gravelly fat clay with cobbles (CH); brown, hard, highly plastic, nonindurated, dry; 30 percent gravel, 15 percent cobbles.
Test Pit 7	
0.0' - 1.0'	Lean clay with sand (CL); topsoil, dark brown-black, soft, low plasticity, nonindurated, dry.
1.0' - 2.3'	Gravelly lean clay (CL); dark gray, stiff, low to medium plasticity, nonindurated, dry; 15 percent gravel.
2.3' - 7.4'	Sandy fat clay with gravel and cobbles (CH); brown, hard, highly plastic, nonindurated, dry; 20 percent sand, 15 percent gravel, 15 percent cobbles.
Test Pit 8	
0.0' - 1.0'	Sandy lean clay with gravel (CL); topsoil, dark gray-black, soft, low plasticity, nonindurated, dry; 25 percent sand, 15 percent gravel.
1.0' - 3.8'	Gravelly fat clay (CH); brown, hard, highly plastic, nonindurated, dry; 35 percent gravel.
3.8' - 4.6'	Sand/silt (SM/ML); tan, medium dense/stiff, low to no plasticity, nonindurated, dry; 50 percent very fine sand, 50 percent silt.
4.6' - 8.9'	Clayey gravel with sand (GC); brown, high density, medium to high plasticity, nonindurated, dry; 25 percent sand, 40 percent gravel, 25 percent fines
Test Pit 9	
0.0' - 1.9'	Lean clay with sand (CL); topsoil, dark gray-black, firm, low plasticity, nonindurated, dry.
1.9' - 3.9'	Fat clay with gravel and cobbles (CH); brown, very stiff, highly plastic, nonindurated, moist; 20 percent gravel, 15 percent cobbles.

Note: Ground water encountered at 3.9 feet below the ground surface.

Test Pit 10	
0.0' - 2.7'	Fill material, coarse sand and gravel.
2.7' - 4.1'	Sandy lean clay (CL); topsoil, dark gray-black, firm, low to no plasticity, nonindurated, moist; 20 percent sand.
4.1' - 7.6'	Gravelly fat clay (CH); dark gray-black, very stiff, highly plastic, nonindurated, moist to wet; 25 percent gravel.
Note: Ground wa Subtract	ter encountered at 7.6 feet below the ground surface. thickness of fill material for actual depth to water.
Test Pit 11	
0.0' - 2.0'	Gravelly lean clay with sand (CL); topsoil, dark gray-black, firm, low to no plasticity, nonindurated, moist; 15 percent sand, 20 percent gravel.
2.0' - 4.7'	Gravelly fat clay with cobbles (CH); brown, hard, highly plastic, induration increases with depth (from stage I to stage II caliche), dry to moist; 30 percent gravel, 20 percent cobbles.
4.7' - 9.4'	Gravelly fat clay with cobbles (CH); brown, hard, highly plastic, moderately indurated (stage II/stage III caliche), dry to moist; 30 percent gravel, 20 percent cobbles.
Test Pit 12	
0.0' - 1.7'	Gravelly lean clay with sand (CL); topsoil, dark gray-black, soft, low plasticity, nonindurated, dry; 15 percent sand, 20 percent gravel.
1.7' - 4.5'	Lean clay with gravel (CL); dark gray-dark brown, firm, low to medium plasticity, nonindurated, dry; 15 percent gravel.
4.5' - 9.7'	Gravelly fat clay with cobbles (CH); brown, hard, highly plastic, nonindurated, dry; 30 percent gravel, 20 percent cobbles.
Test Pit 13	
0.0' - 1.4'	Gravelly lean clay with sand (CL); topsoil, dark gray-black, soft, low plasticity, nonindurated, dry; 15 percent sand, 20 percent gravel.
1.4' - 8.8'	Gravelly fat clay with cobbles (CH); brown, hard, highly plastic, nonindurated, dry; 30 percent gravel, 20 percent cobbles, minor caliche coatings on cobbles and gravel at depth.

Suzanne Dandoy, M.D., M.P.H. Executive Director

# COMMUNICABLE DISEASE NEWSLETTER

Adele P. Nelson, R.N., M.P.H., Director Division of Community Health Services

EDITOR: Craig R. Nichols, M.P.A., State Epidemiologist Director, Bureau of Epidemiology (801) 533-6191 MONTH November YEAR 1985

#### CONTENTS

- 1. Tetracycline-Resistant Neisseria gonorrhoeae
- 2. AIDS Reporting
- 3. Recommendations for Preventing Transmission of Infection with HTLV-III in Workplace
- 4. Revised Infection Control Guidelines
- 5. Holiday Greetings

#### TETRACYCLINE-RESISTANT NEISSERIA GONORRHOEAE

The first isolation of tetracycline resistant <u>Neisseria gonorrhoeae</u> (TRNG) in Utah was reported during November. The isolated strain was also found to produce beta-lactamase and was, therefore, resistant to penicillin.

Antibiotic resistance was suspected when the patient remained symptomatic after initial treatment with doxycycline. Subsequent treatment with ampicillin, probenecid and tetracycline was also unsuccessful. When sensitivity testing results became available, the patient received spectinomycin (2.0 g IM) and became asymptomatic.

An interview with the patient indicated that he became infected after sexual contact (during September) with a prostitute in Korea. No transmission has occurred in Utah.

All positive test-of-cure cultures for gonorrhea should be screened for tetracycline resistance by disk diffusion in addition to recommended testing procedures for penicillinase producing strains of N. gonorrhoeae (PPNG) and chromosomal-mediated resistant N. gonorrhoeae (CMRNG). All gonococcal isolates suspected of being resistant to antibiotics should be submitted to the State Health Laboratory for confirmation.

Because of the increase in resistant strains of gonococci and the coexistant chlamydial infections, the following treatment regimen is recommended for adults with uncomplicated urethral, endocervical or rectal infection:

Amoxicillin 3.0 g or ampicillin 3.5 g by mouth OR aqueous procaine penicillin G (APPG) 4.8 million units IM OR ceftriaxone 250 mg IM.

Amoxicillin, ampicillin and penicillin (but not ceftriaxone) are accompanied by probenecid 1 gram by mouth.

Comment: APPG may be less desirable because of associated pain and toxicity.

#### PLUS

Tetracycline HCI 500 mg by mouth 4 times daily for 7 days OR doxycycline 100 mg by mouth twice daily for 7 days.

OR

For patients in whom tetracyclines are contraindicated or not tolerated, the single-dose regimen may be followed by erythromycin base or stearate 500 mg by mouth 4 times daily for 7 days OR erythromycin ethylsuccinate 800 mg by mouth 4 times daily for 7 days.

### AIDS REPORTING

Recently two cases of acquired immunodeficiency syndrome (AIDS) were discovered through review of death certificates. Neither case had been previously reported to our office and, therefore, a thorough epidemiological investigation was impossible. Utah law requires that all AIDS cases (confirmed and suspect) be reported to the local health department or the Bureau of Epidemiology. Your cooperation in promptly reporting all cases and suspects will greatly improve our understanding of viral transmission.

## RECOMMENDATIONS FOR PREVENTING TRANSMISSION OF INFECTION WITH HTLV-III IN THE WORKPLACE

Recommendations have been developed to prevent transmission of the human T lymphotropic virus type lll/lymphadenopathy associated virus (HTLV 111/LAV) in occupational settings. Particular emphasis has been placed on prevention in the health care industry as well as related occupations where exposure may occur to blood infected with HTLV-lll/LAV, the "AlDS virus".

Many of the preventative measures for health care workers which have been published previously<sup>2,3</sup> are reinforced and supplemented by the new guidelines. All health care workers should become familiar with the recommendations; single copies are available from the Bureau of Epidemiology. Formulation of specific recommendations for health-care workers who perform invasive procedures (e.g., surgeon, dentist) is in progress. Separate recommendations are also being developed to prevent HTLV-III/LAV transmission in prisons, other correctional facilities, and institutions housing individuals who may exhibit uncontrollable behavior and in the perinatal setting.

A few of the recommendations follow, especially those dealing with topics of current interest in Utah. However, because of the length of the document, we recommend a thorough reading of all guidelines.

"Transmission from Health-Care Workers (HCWs) to Patients. Although there is no evidence that HCWs infected with HTLV-III/LAV have transmitted infection to patients, a risk of transmission of HTLV-III/LAV infection from HCWs to patients would exist in situations where there is both (1) a high degree of trauma to the patient that would provide a portal of entry for the virus (e.g., during invasive procedures) and (2) access of blood or serous fluid from the infected HCW to the open tissue of a patient, as could occur if the HCW sustains a needlestick or scalpel injury during an invasive procedure. HCWs known to be infected with HTLV-III/LAV who do not perform invasive procedures need not be restricted from work unless they have evidence of other infection or illness for which any HCW should be restricted. Whether additional restrictions are indicated for HCWs who perform invasive procedures is currently being considered."

"These precautions apply to all HCWs, regardless of whether they perform invasive procedures: (1) All HCWs should wear gloves for direct contact with mucous membranes or nonintact skin of all patients and (2) HCWs who have exudative lesions or weeping dermatitis should refrain from all direct patient care and from handling patient care equipment until the condition resolves."

## MONTHLY MORBIDITY SUMMARY

## UTAH STATE DEPARTMENT OF HEALTH SELECTED REPORTABLE DISEASES

APPROVAL #8000008
APPROPRIATION #2870-A33011

Month NOVEMBER 1985

APPROPRIAT	TION #2870-A	1330	11			VS CEL		2 3/2			Cape Co		MONTH					
County	Estimated Population	Colorado Tick Fever	Gonorrhea	Hepatitis (A & Unspecified)	Hepatitis B	Influenza	Meningitis (Bacterial)	Meningitis (Non-bacterial)	Meningococcal	Pattacosis	Rebies (Animal)	Rubella	Rubeola	Salmonellosia	Shigeliosis	Syphilis (Primary & Secondary	Tuberculosis (New Active & Relapse)	Tularemia
Beaver	5,100		1237			812.15												
Box Elder	35,500		3															
Cache	65,000	San S	1		1													
Carbon	23,400		1		1													
Daggett	750												1.023	Asserting .			ALTO.	
Davis	165,000		12	1		29						MARK				1		
Duchesne	14,600	2.5			10.25		A SECOND						N-2/5					
Emery	12,400																	
Garfield	3,950				The same					5/4								
Grand	7,600	100														1824	1	
Iron	19,000	7.4%					F57,24			TA CO								
Juab	6,050		ALL ST	100						V.								
Kane	4,500		13,85			Paring.						57/18				(A) (A)		
Millard	13,500	7.4		A topic														
Morgan	5,300														3	A. A.	1	
Piute	1,500																	
Rich	2,150																	
Salt Lake	675,000		71	4	6	6	3	2						1	2	1	4	
San Juan	12,600		4															
Sanpete	16,800			3.4.7	N. P.				ALL									
Sevier	15,900											25-3			Men			
Summit	12,000		2						75									
Tooele	28,100																	
Uintah	24,200		1	3														
Utah	245,000	17.72	6	1			3	1	108114					1	1			
Wasatch	9,200																	
Washington	32,300		2				739										No.	
Wayne	2,100																	
Weber	154,500	193	10	6	1									1		100		
Utah State Total	1,613,000	0	113	15	9	35	6	3	0	0	0	0	0	3	6	2	5	0
This Mo. Last Yr.	NOV 84	0	89	26	12	135	9	7	1	0	0	0	0	9	7	1	2	0
This Yr. To Date	1985	11	1259	305	155	2076	106	50	9	0	4	0	0	91	91	13	17	3
Last Yr.To Date	1984	23	1204	449	86	3083	93	59	8	1	6	7	27	113	71	33	35	6
	CAMPYLOBACT		7 CV	CAREC	AL CIVI	DIE	1 (	TADO	7407	0 7	7 6			DADDE	0		3076-105-1	1000

Other Diseases: CAMPYLOBACTER -3, CYTOMEGALOVIRUS -1, GIARDIASIS -37, GUILLAIN-BARRE -2, LEGIONELLOSIS -2, HANSEN'S DISEASE -1, PERTUSSIS -1, RHEUMATIC FEVER -2, TYPHOID FEVER -1

"HCWs who are known to be infected with HTLV-111/LAV and who have defective immune systems are at increased risk of acquiring or experiencing serious complications of other infectious diseases. Of particular concern is the risk of severe infection following exposure to patients with infectious diseases that are easily transmitted if appropriate precautions are not taken (e.g., tuberculosis). HCWs infected with HTLV-III/LAV should be counseled about the potential risk associated with taking care of patients with transmissible infections and should continue to follow existing recommendations for infection control to minimize their risk of exposure to other infectious agents. The HCWs' personal physician(s), in conjunction with their institutions' personnel health services or medical directors, should determine on an individual basis whether the infected HCWs can adequately and safely perform patient care duties and suggest changes in work assignments, if indicated. In making this determination, recommendations of the Immunization Practices Advisory Committee and institutional policies concerning requirements for vaccinating HCWs with live-virus vaccines should also be considered."

"Personal-service workers (PSWs). PSWs are defined as individuals whose occupations involve close personal contact with clients (e.g., hairdressers, barbers, estheticians, cosmetologists, manicurists, pedicurists, massage therapists). PSWs whose services (tattooing, ear piercing, acupuncture, etc.) require needles or other instruments that penetrate the skin should follow precautions indicated for HCWs. Although there is no evidence of transmission of HTLV III/LAV from clients to PSWs, from PSWs to clients, or between clients of PSWs, a risk of transmission would exist from PSWs to clients and vice versa in situations where there is both (1) trauma to one of the individuals that would provide a portal of entry for the virus and (2) access of blood or serous fluid from one infected person to the open tissue of the other, as could occur if either sustained a cut. A risk of transmission from client to client exists when instruments contaminated with blood are not sterilized or disinfected between clients. However, hepatitis B virus (HBV) transmission has been documented only rarely in acupuncture, ear piercing, and tattoo establishments and never in other personal service settings, indicating that any risk for HTLV III/LAV transmission in personal-service settings must be extremely low."

"Instruments that are intended to penetrate the skin (e.g., tattooing and acupuncture needles, ear piercing devices) should be used once and disposed of or be thoroughly cleaned and sterilized after each use using procedures recommended for use in health-care institutions. Instruments not intended to penetrate the skin but which may become contaminated with blood (e.g., razors), should be used for only one client and be disposed of or thoroughly cleaned and disinfected after use using procedures recommended for use in health care institutions. Any PSW with exudative lesions or weeping dermatitis, regardless of HTLV-lll/LAV infection status, should refrain from direct contact with clients until the condition resolves. PSWs known to be infected with HTLV-lll/LAV need not be restricted from work unless they have evidence of other infections or illnesses for which any PSW should also be restricted."

"Routine serologic testing of PSWs for antibody to HTLV-III/LAV is not recommended to prevent transmission from PSWs to clients."

"Food-service workers (FSWs). FSWs are defined as individuals whose occupations involve the preparation or serving of food or beverage (e.g., cooks, caterers, servers, waiters, bartenders, airline attendants). All epidemiologic and laboratory evidence indicates that bloodborne and sexually transmitted infections are not transmitted during the preparation or serving of food or beverages, and no instances of HBV or HTLV-III/LAV transmission have been documented in this setting."

"All FSWs should follow recommended standards and practices of good personal hygiene and food sanitation. All FSWs should exercise care to avoid injury to hands when preparing food. Should such an injury occur, both aesthetic and sanitary considerations would dictate that food contaminated with blood be discarded. FSWs known to be infected with HTLV-III/LAV need not be restricted from work unless they have evidence of other infection or illness for which any FSW should also be restricted."

"No known risk of transmission to co-workers, clients, or consumers exists from HTLV III/LAV infected workers in other settings (e.g., offices, schools, factories, construction sites).

### "References:

- Centers for Disease Control Morbidity and Mortality Weekly Report, Vol. 34/No. 45, November 15, 1986.
- 2 Centers for Disease Control Morbidity and Mortality Weekly Report, Vol. 31/No. 43, November 5, 1982.
- 3 Centers for Disease Control Morbidity and Mortality Weekly Report, Vol. 32/No. 34, September 2, 1983.

## REVISED INFECTION CONTROL GUIDELINES

Two guidelines in the Centers for Disease Control (CDC) series of Guidelines for the Prevention and Control of Nosocomial Infections have been recently revised. The two revised Guidelines are the CDC Guideline for Handwashing and Hospital Environmental Control, 1985, which replaces the Guideline for Hospital Environmental Control, published in 1981, and the CDC Guideline for Prevention of Surgical Wound Infections, 1985, which replaces the Guideline for Prevention of Surgical Wound Infections, published in 1982.

Copies of the Guidelines may be purchased from:
National Technical Information Service (NTIS)
U.S. Department of Commerce
5285 Port Royal Road
Springfield, Virginia 22161
Telephone: (703) 487-4650

### HOLIDAY GREETINGS

The employees of the Bureau of Epidemiology send our best wishes for the holidays and look forward to working with you during the coming year.

Kathy Burrows Duane Call Cristic Chesler Rick Crankshaw Linda Crump Louise Eutropius Naomi Gibson Byron Haslam Mike Kerr Lilly Lakin

Dorthea Lawson Kathy Mejia Craig Nichols Dennis Perrotta Ilene Risk Paul Schlosser Linda Shedd Eunice Taylor Ed Tirmey

## **WASATCH CITY-COUNTY HEALTH DEPARTMENT**

F

**BOARD MEMBERS** 

CALVIN GILES - CHAIRMAN

CONNIE TATTON - VICE CHAIRMAN MIDWAY

ELIZABETH MURDOCK - MEMBER HEBER

RULON PHILLIPS - MEMBER WALLSBURG

LYNN WEBSTER - MEMBER CHARLESTON

R. RAYMOND GREEN. MD - MEDICAL OFFICER HEBER CITY

R. C. TADD - CHAIRMAN COUNTY 805 WEST 100 SOUTH HEBER CITY, UTAH 84032 PHONE (801) 654-2700

DHANZER

November 13, 1985

STAFF

PHIL D. WRIGHT, M.S., R.S. HEALTH OFFICER

MAXINE MCAFFEE, R.N. NURSING DIRECTOR

MAREN DURTSCHI, R.N.
COMMUNITY HEALTH NURSE

RANAE WILLIMS, R.D.
NUTRITIONIST/EDUCATOR

ROBERT BLANTHORN, M.S.W. ALCOHOL/DRUG DIRECTOR

NELDA DUKE OFFICE MANAGER

Dee Hansen, State Engineer 1636 West North Temple Salt Lake City, Utah 84116

Dear Mr. Hansen,

The Wasatch City/County Health Department is somewhat concerned regarding the drilling of culinary wells in Wasatch County. We feel that many of the individual wells are not being properly constructed which could result in contamination of the aquifer. The board of health has imposed requirements more stringent that the State Health Department for septic tank and drainfield wastewater disposal systems to help protect the drinking water and would like help from your office in insuring that individual wells are properly constructed to further insure that our culinary water is protected.

We would also like to request that copies of well drillers logs for any wells constructed in Wasatch County be sent to our health department as they are received in your office. This would help us keep track of new wells that are being developed.

We appreciate your help in this problem. We are anxiously awaiting your reply.

Thank You,

Phil D. Wright, M.S., R.S. Health Officer

## WASATCH CITY/COUNTY BOARD OF HEALTH AGENDA

November 18, 1985

12:00 Noon

Health Offices

Welcome:

Approval of Minutes:

Alcohol & Drug Report: ~ 30 > extro therapist Aury + Coral

Report on Clinics:

Immunization- 106

Hypertension- 36

Well Child- 16

Well Child Referral Program:

School Health:

√Scoliosis:

State Engineer Letter:

Mill Flat Water System: - below upper plant Snoke Creek,

Timberlakes Water System:

Rural Water Assistance:

Bed & Breakfast:

Mine Tailings:

Local Health Department Funding Task Force Report:

1986 Budget Review: (See attached copy)

7 people. marginal

## WASATCH CITY-COUNTY HEALTH DEPARTMENT

## PROPOSED BUDGET 1986

## 23-4582 Public Health Services

110	Permanent Employees	\$108,732
130	Benefits	38,056
	Total	146,788
	(This includes a 5% increase	
	in wages & 3 hr/da secretarial hel	.p) <sup>`</sup>
210	Books, subscriptions & memberships	1,300
220	Public notices	100
230	Travel 275/mo	3,300
240	Office Supplies 250/mo	3,000
250	Equipment supplies & maint. 375/mo	4,500
260	Building expense	1,000
280	Telephone 200/mo	2,400
310	Professional & technical	21,000
	(This pays physician help for Well	
	Child Clinic & 7,000 Emergency	
	Medical Care)	
312	Medical Officer	2,000
460	Clinic Supplies	600
530	Interest	6,000
531	Tax Collection	2,800
740	Equipment	7,000
	•	
	Sub Total	55.000

Total \$201,788

## WASATCH CITY-COUNTY HEALTH DEPARTMENT

## ANTICIPATED REVENUE 1986

23-3400	Char	ges for Services		
3450	Immu	nization Clinics		\$2,000
3451	School	ol Contract		8,700
3452	Sept	ic Tank Inspections		800
3453	Food	Handlers Fees		150
3454	Flu (	Clinic		360
3456	Well	Child Clinic		400
3457	Food	Permits		150
3458	Serv	ices (Senior Citizens)		<u>3,000</u>
•			Total	15,610
23-3300	Inte	rgovernmental Revenue		
	3310	General Health	•	\$10,000
	3320	Prevention Block		7,134
	3330	Immunization		2,000
	3340	Clean Air Act		300
	3342	State Grants		-0-
1	3350	MCH Block		12,000
	3360	WIC Adm		30,000
	3361	WIC Nutrition Ed		5,000
	3370	Well Child		7,000
	3380	Maternal Health		3,500
	3381	MCH Special		-0-
	3382	Occupant Protection		-0-

3383

Computer.

Total Charges for Service & Grants \$95,544

Total

3,000

79,934

Budget Estimate for 1986 \$201,788

Less fees for services & contracts \_\_\_95,544

Equals 1.97 mils \_\_\$106.244

This compares with 1.94 mils for 1985

## MINUTES OF THE WASATCH CITY-COUNTY BOARD OF HEALTH

November 18, 1985

12:10 P.M.

Health Offices

Present were:

Calvin Giles Connie Tatton Elizabeth Murdock Lynn Webster

R. Raymond Green, M.D. Phil D. Wright, M.S. R.S.

R.C. Tadd

Robert Blanthorn, M.S.W. Larry Carcelli, Ph.D. Maxine McAffee, R.N. Maren Durtschi, R.N.

Ranae Williams, R.D.

Nelda Duke

Chairman Vice-chairman

Member Member

Medical Officer Health Officer Commissioner

Alcohol/Drug Director Mental Health

Nurse Supervisor

Nurse

Nutritionist/Educator

Secretary

Welcome:

Mr. Giles welcomed those present and called the

meeting to order.

Invocation:

Mrs. Tatton offered the invocation.

Minutes:

Minutes of the meeting held September 16, 1985 were read by Mrs. Duke. Mrs. Tatton made a motion minutes be approved as read. Mr. Webster seconded motion. Motion

carried.

Mental Health:

Mr. Carcelli reported he had recently tried to admit an adolescent to the Timpanogos Community Mental Health Center but found they had no beds for adolescents. He immediately made contacts and now the center has two beds for adolescents and adolescent beds will be provided at the new unit. Mr. Carcelli also stated he is starting a self help group. They have held one meeting with five in attendance. He would appreciate any referrals we might have to join this group.

Alcohol/Drug:

Mr. Blanthorn stated he is now serving 22 clients. The state requires .19 and they can carry up to 30 clients

without getting an additional consultant.

Mr. Blanthorn also stated they have a boys group of 8 and a girls group of 10 going in the high school. The girls group is full so it will probably be necessary to form a second group for girls. A peer counseling class

is also being planned for the high school.

Clinic Report:

Mrs. McAffee reported the following was administered and

in our clinics last month:

Immunizations-106 Flu-187 Blood Pressure-36

Well Child Exams-16 WIC vouchered-260 (276 on program).

Cancer Screening Clinic:

Mrs. McAffee reported that results from the Cancer Screening Clinic held in August showed 78 women were screened and 5 were referred for further follow-up.

Well Child Referral Program:

Mr. Wright stated the state had given us \$7,000 for children seen in Well Child Clinics who do not have money for further treatment. These children will be referred to their private physician and we will pay for treatment at Medicade rates. Several doctors have indicated they would like to participate in this program.

Occupant Protection:

Mrs. Williams stated we received a grant for \$1,000 to be used for Occupant Protection. We have made a display that related to alcohol and drinking and it is available to be displayed in public buildings. It has been displayed in the health department and the highway patrol office. She asked for suggestions as to other places this might be displayed. Mrs. Tatton suggested Neilson's Merc in Midway or City and County offices.

School Health:

Mrs. Durtschi stated she had been doing TB testing on new school employees. She found 2 employees and 3 out of state students,1 mother and 1 immigrant from the Phillipines to have a positive reaction. Follow-up is being done.

Mrs. Durtschi also stated she is conducting an amblyopia and hearing clinic on November 22nd. We expect a good response.

Scoliosis Screening: Mrs. Durtschi submitted a letter from Dr. Jarvis to Superintendent Merkley regarding scoliosis screening in the schools.

After some discussion Mrs. Tatton made a motion we continue to do scoliosis screening in the schools as it is presently being done. Mrs. Murdock seconded motion. Motion carried.

Proper Well Drilling:

Mr. Wright stated we have received a few complaints that wells drilled in the valley have not been properly grouted. He submitted a copy of a letter written to the state engineer regarding the drilling of wells. (See copy  $#_1$ ).

Mill Flat Water System:

Mr. Wright said the Mill Flat Subdivision located downhill from the upper Snake Creek Power Plant currently has 5 homes on it. The water source is not adequate and they will have to improve the source and submit samples before approval can be given.

Dry Subdivisions: Mr. Wright submitted a copy of a proposed regulation for dry subdivisions. He asked board members to study this document so it can be discussed in future meetings.

Timberlakes:

Mr. Wright said Timberlakes have approval from the state to develop a new water system. They still have a few things to do before they can get approval from the county.

Rural Water Assistance:

Mr. Wright stated he had written a letter for help on our water systems and a meeting is being set up for January 15, 1986 at 7:00 P.M. All rural water companies will be invited. Mrs. Tatton made a motion we invite all the mayors and town council members of the county to attend this meeting. Dr. Green seconded motion. Motion carried.

Bed & Breakfast:

Mr. Wright said he had received another request to open a Bed & Breakfast facility. We have no regulations for such a facility because most of them do not cook breakfast so they do not fall under food service regulations. Dr. Klein wants to open such a facility and will serve a full breakfast so he will fall under food service regulations.

Mine Tailings:

Mr. Wright stated he was called to a meeting on hazardous waste to discuss the mine tailings at Neilson-Nyhart but the meeting was postponed. We are anxious to find out if there is a problem before it gets out of hand.

Task Force:

Mr. Wright said a task force had been organized to study the distribution of funding for health departments.

Proposed Budget:

A copy of our Proposed Budget for 1986 was submitted by Mr. Wright. After some discussion Commissioner Tadd made a motion we approve this budget. Mrs. Murdock seconded motion. Motion carried.

Christmas Party:

Mr. Giles asked Commissioner Tadd and Mrs. Williams to be in charge of our annual Christmas Party.

Meeting Schedule:

It was mentioned we need to schedule our board meetings for next year to be published in the local paper. It was decided to continue to meet on the Third Monday of each month.

Meeting adjourned at 1:50 P.M.

Chairman

## RULES & REGULATIONS RESPECTING THE PROHIBITION OF "DRY" RECREATIONAL SUBDIVISIONS LOCATED IN WASATCH COUNTY, UTAH

WHEREAS, persuant to U.C.A. 26-24-20, 1953 as amended, the Wasatch City/County Health Department is granted authority to adopt rules, regulations, and standards, not in conflict with rules promulgated by the Department of Health of the State of Utah, which are necessary for the promotion of public health, environmental health quality, injury control and the prevention of outbreaks and spread of communicable diseases; and

WHEREAS, it is the opinion and position of the Utah State
Department of Health, Division of Environmental Health, that "dry"
recreational subdivisions without a piped water system, or with no
demonstrated means for developing acceptable individual water supply
systems, should not be approved by local government authorities; and

WHEREAS, said opinion has been disseminated by written memorandum to all health officers and environmental health supervisors of all local health departments; and

WHEREAS, the State of Utah, from years of experience in reviewing environmental health aspects of recreational subdivisions has reached the conclusion that the existence of "dry" subdivisions contributes to a number of actual and potential public health problems; and

WHEREAS, further it is the position of the State of Utah that local ordinances and regulations should be reviewed for adequacy, and where necessary, modified to clearly prohibit approval of "dry" subdivisions; and

WHEREAS, it is in the public interest that rules and reguations be adopted in order to avoid actual and potential public health problems;

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF HEALTH OF THE WASATCH CITY/COUNTY HEALTH DEPARTMENT, HAVING JURISDICTION IN ALL CITIES, TOWNS AND UNINCORPORATED AREAS IN WASATCH COUNTY, UTAH, THE FOLLOWING RULES AND REGULATIONS:

I That for the purpose of this regulation a "dry" subdivision shall be defined as any subdivision without a piped public water system, or with no demonstrated means of developing acceptable individual water supply systems.

- II All "dry" recreational subdivisions shall be prohibited within the boundaries of Wasatch County, Utah.
- III The hauling of culinary water shall not be a substitute for a permanent water system.
- IV The hauling of culinary water will only be approved on a temporary emergency condition as determined by the Department.
- V Evidence of water rights for culinary use be submitted to the Wasatch City/County Health Department before approval of any recreational subdivision.
- VI All water systems shall be pressurized and shall otherwise meet all of the requirements of the Utah Plumbing Code. For the purposes of this regulation an elevated cistern shall not constitute a pressurized water system for approval of subdivisions.
- VII All culinary water shall meet the quality and quantity standards of the State of Utah and Wasatch County.
- VIII All subdivisions shall meet the minimum sanitary facilities of the Utah Plumbing Code.
  - IX All waste water facilities shall comply with the existing Utah State Regulations for Wastewater Disposal Systems.

ADOPT	ED by	the	Health	Council	of '	the	Wasatch (	City/Cou	nty	Health	i.
Department	this	the_	day	of			19	9			
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•						(	Chairman,	Board o	f He	alth	

WITEDI.		
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# UTAH DEPARTMENT OF HEALTH DIVISION OF COMMUNITY HEALTH SERVICES BUREAU OF EPIDEMIOLOGY

Suzanne Dandoy, M.D., M.P.H. Executive Director

## COMMUNICABLE DISEASE NEWSLETTER

J. Brett Lazar, M.D., M.P.H., Director Division of Community Health Services EDITOR: Craig R. Nichols, M.P.A., State Epidemiologist Director, Bureau of Epidemiology (801) 533-6191 MONTH December YEAR 1985

CONTENTS

- 1. AIDS Utah 1983-1985
- 2. Business Reply Mail
- 3. Recommendations for Assisting in the Prevention of Perinatal Transmission of HTLV-III/LAV and Acquired Immunodeficiency Syndrome

## AIDS - UTAH 1983-1985

Thirty cases of acquired immunodeficiency syndrome (AIDS) were diagnosed in Utah residents during the three-year period 1983-1985. The distribution of cases by patient groups (Table 1) is consistent with national trends. The Utah fatality rate (47%) has remained near the 50% level; nationally, 51% of all AIDS patients are now known to have died.

The number of AIDS cases continues to increase steadily. Only two cases were reported in 1983, followed by eight cases in 1984 and 20 cases in 1985 (Table 2). At least 30 new cases are expected during 1986. However, based upon the number of individuals found to be human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV) antibody positive in the State (350+), as many as 50 cases are not unlikely.

The 30 cases include two children and three women. The age distribution is shown in Table 3. Average age of the patients at time of onset is 31 years.

The most common opportunistic illness seen in Utah (Table 4) and the United States is Preumocystis carinii pneumonia.

Table 1

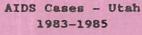
## Total Adult/Adolescent AIDS Cases By Patient Groups

	u.s.1		Utah <sup>2</sup>	
Patient Groups	Cases	(%)	Cases	(%)
Homosexual/Bisexual Men	11,513	(73)	21	(70)
Intravenous Drug User	2,684	(17)	5	(17)
Hemophilia/Coagulation Disorder	123	(1)	0	(0)
Heterosexual Contact [To Case or At Risk]	179	(1)	0	(0)
Transfusions: Blood or Blood Products	252	(2)	3	(10)
None of the Above/Other	968	(6)	1	(3)
TOTAL	15,719	(100)	30	(100)

<sup>1</sup> Centers for Disease Control, AIDS Weekly Surveillance Report, December 30, 1985

<sup>2</sup> Cases reported through December 31, 1985

### Table 2



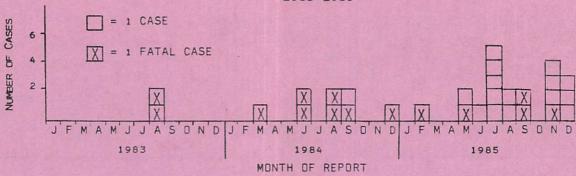


Table 3

## Age Distribution - Utah AIDS Cases 1983-1985

AGE	CASES	(%)	
Under 13	2	(7)	
13 - 19	0	(0)	
20 - 29	8	(27)	
30 - 39	16	(53)	
40 - 49	4	(13)	
Over 49	0	(0)	
Total	30		

Table 4

## Associated Disease - Utah AIDS Cases 1983-1985

			Known	
DISEASE GROUP* +	Cases	(%)	Deaths	(% Dead)
Both KS and PCP	2	(7)	1	(50)
KS without PCP	6	(20)	1	(17)
PCP without KS	16	(53)	8	(50)
OI without KS or PCP	6	(20)	4	(67)
TOTAL	30	(100)	14	(47)

<sup>\*</sup> KS = Kaposi's sarcoma; PCP = <u>Pneumocystis</u> <u>carinii</u> pneumonia; OI = other opportunistic infections

<sup>+</sup> Groups listed are ordered hierarchically; cases with multiple characteristics are tabulated only in the group listed first.

#### BUSINESS REPLY MAIL

The United States Postal Service has revised business reply mail guidelines, which require that we make changes to our business reply envelopes. The pre paid envelopes which have been distributed in the past will no longer be accepted. All present inventory should be destroyed. Physicians who need a supply of the new envelopes, which are used to mail the "Utah Confidential Morbidity Report Card", should contact the office listed on the present envelopes.

# RECOMMENDATIONS FOR ASSISTING IN THE PREVENTION OF PERINATAL TRANSMISSION OF HTLV-III/LAV AND ACQUIRED IMMUNODEFICIENCY SYNDROME<sup>1</sup>

The Centers for Disease Control (CDC) and the U.S. Public Health Service with the assistance of a large number of consultants have provided recommendations to assist in prevention of perinatal transmission of human T-lymphotropic virus type ITI/lymphadenopathy-associated virus (HTLV III/LAV), the virus that causes acquired immunodeficiency syndrome (AIDS).

As of December 30, 1985, 229 (1%) of the 15,948 AIDS cases reported to CDC occurred among children under 13 years of age. Of these children, 59% are known to have died. In Utah, only two cases of pediatric AIDS have been reported, both are dead.

The majority (75%) of children with AIDS have as their only risk factor a mother belonging to a group with increased prevalence of HTLV-11I/LAV infection. An additional 20% of the pediatric cases are attributable to transfusions of blood or blood products, while risk factor information is missing or incomplete on the remaining 5%.

As with previous AIDS guidelines, the length and detail of the recommendations prohibits printing all sections. However, a few of the pertinent recommendations follow. Single copies of the complete guidelines are available on request.

"Mechanisms of Perinatal Transmission. It is believed that HTLV III/LAV is transmitted from infected women to their fetuses or offspring during pregnancy, during labor and delivery, or perhaps shortly after birth. Transmission of the virus during pregnancy or labor and delivery is demonstrated by two reported AIDS cases occurring in children who had no contact with their infected mothers after birth. One was delivered by Cesarean section.

"Transmission of the virus after birth has been implicated in one case of HTLV-III/LAV infection in a child born to a mother reported to have acquired the infection from a postpartum blood transfusion. Since she breastfed the child for 6 weeks, the authors suggested breastfeeding as the possible mode of transmission. Recently, HTLV-III/LAV has been isolated from the breast milk of infected women.

"Risk of Perinatal Transmission from Infected Mothers. The rate of perinatal transmission of HTLV-III/LAV from infected pregnant women is unknown; however, available data suggest a high rate. In one study of 20 infants born to women who already delivered one infant with AIDS, 13 (65%) had

serologic and/or clinical evidence of infection with HTLV-III/LAV several months after birth. Since these women were selected on the basis of having previously transmitted HTLV-III/LAV perinatally, this study may overestimate the average risk of transmission for all infected pregnant women.

"Perinatal transmission from an infected mother to her newborn is not inevitable. Of three children born to women who became infected with HTLV-III/LAV by artificial insemination from an infected donor, all were in good health and negative for antibody to the virus more than 1 year after birth. Another child, born to a woman who was already pregnant at the time of AIDS diagnosis and was demonstrated to be viremic, was seronegative, culture negative, and healthy at birth and at 4 months of age. In a retrospective study evaluating nine children under 5 years of age whose mothers were later diagnosed with AIDS, two (22%) had antibody to HTLV-III/LAV. The infection status of these women during pregnancy was unknown.

"In these studies, the rate of transmission ranged from 0% (0/3) to 65% (13/20). Additional studies are needed to better define the rate of transmission and variables associated with it."

"Women Who Should be Offered Counselling and Testing. Counselling services and testing for antibody to HTLV-III/LAV should be offered to pregnant women and women who may become pregnant in the following groups: (1) those who have evidence of HTLV-III/LAV infection; (2) those who have used drugs intravenously for nonmedical purposes; (3) those who were born in countries where heterosexual transmission is thought to play a major role; (4) those who have engaged in prostitution; (5) those who are or have been sex partners of: IV drug abusers, bisexual men, men with hemophilia, men who were born in countries where heterosexual transmission is thought to play a major role, or men who otherwise have evidence of HTLV-III/LAV infection. If data become available to show that HTLV-III/LAV-antibody prevalence is increased in other groups or settings, counselling and testing programs should be extended to include them. Routine counselling and testing of women who are not included in the above-mentioned groups is not recommended due to low prevalence of infection and concern about interpretation of test results in a low-prevalence population. However if a woman requests it, the service should be provided in accordance with these recommendations."

"Frequency of Testing. Detectable antibodies to HTLV-III/LAV may not develop until 2-4 months after exposure. This, and whether the woman is continuously exposed, should be taken into account when considering the need for, and frequency of, repeat testing. High-risk women should be offered counselling and testing before they become pregnant. During pregnancy, counselling and testing should be offered as soon as the woman is known to be pregnant. If the initial test is negative, repeat testing may be indicated near delivery to aid in the clinical management of the pregnant woman and newborn. If this final test is negative and the mother's risk of exposure no longer exists, she may safely consider breastfeeding the child, and management of the child need not include the same concerns that would be appropriate if the woman had had a positive test or if she were at high risk and had not been tested at all."

#### Reference

1 Centers for Disease Control, Morbidity and Mortality Weekly Report, Vol. 34/No. 48, December 6, 1985.